IN THE CLAIMS

PLEASE AMEND THE CLAIMS AS FOLLOWS:

1. (currently amended) A method of amplifying a polarized input beam, comprising the steps of:

aligning at least four slabs spaced from adjacent slabs, each of the slabs having a thickness dimension of not more than 1 centimeter,~~,~~ wherein slab surfaces of the at least four slabs are placed within about 1 degree of ~~the~~ a Brewster angle with respect to the polarized input beam, and no two of the slab surfaces are within 0.1 degree of parallel with respect to each other;

optically pumping the at least four slabs; and

passing the polarized input beam through the slab surfaces, wherein the polarized input beam is optically amplified in the at least four slabs,

wherein half of the slab surfaces are slanted in one direction and half of the slab surfaces are slanted in an opposite direction, the opposite slanting slab surfaces being configured to control spreading of an output beam.

2. (cancelled)

3. (previously presented) The method of claim 1, wherein the at least four slabs comprise Cr:YAG slabs.

4. (previously presented) The method of claim 1, further including passing cooling fluid between the at least four slabs.

5. (previously presented) The method of claim 1, wherein the slab surfaces include dielectric surface coatings.

6. (previously presented) The method of claim 1, further including pumping the at least four slabs using pump diodes.

7. (previously presented) The method of claim 1, wherein the at least four slabs are tilted in a same direction such that a cross-sectional area of a line shaped beam is reduced during amplification.

8. (previously presented) The method of claim 1, wherein the polarized input beam has a wavelength of between 1400 and 1800 nm.

9. (previously presented) The method of claim 1, wherein the thickness dimension is less than 3 millimeters.

10. (cancelled)

11. (currently amended) A method of amplifying an optical beam, comprising the steps of:

aligning at least four optical-amplifier slabs, each of the optical-amplifier slabs having two opposed slab surfaces that are substantially perpendicular to a thickness dimension, the thickness dimension being less than one centimeter, the slab surfaces of a first of the four optical-amplifier slabs being slightly non-parallel to slab surfaces of an adjacent member of the four optical-amplifier slabs, and the first of the four optical-amplifier slabs being separated by an intervening space from the adjacent member of the four optical-amplifier slabs, the slab surfaces being essentially non-reflective;

optically pumping the optical-amplifier slabs; and

passing the optical beam through the slab surfaces to amplify the optical beam, the optical beam being of an eye-safe wavelength,

wherein the optical beam is passed through the at least four optical-amplifier slabs within about 1 degree of a Brewster angle of the slab surfaces, wherein half of the

at least four optical-amplifier slabs are slanted in one direction and half of the at least four optical-amplifier slabs are slanted in an opposite direction, the opposite slanting half of the at least four optical-amplifier slabs being configured to control spreading of an output beam.

12. (previously presented) The method of claim 11, wherein the slab surfaces of the first of the four optical-amplifier slabs are not within 0.1 degree of being parallel to each other and are not within 0.1 degree of being parallel to the slab surfaces of other members of the four optical-amplifier slabs.

13. (previously presented) The method of claim 11, wherein the thickness dimension of each optical-amplifier slab is less than 3 mm and a diameter of the slab surfaces is at least 5 mm.

14. (previously presented) The method of claim 11, wherein the optical beam has a wavelength between 1400 and 1800 nm.

15. (previously presented) The method of claim 11, further comprising pumping the at least four optical-amplifier slabs using pump diodes.

16. (cancelled)

17. (previously presented) The method of claim 10, wherein the at least two optical-amplifier slabs are each wedge-shaped.

18. (currently amended) An amplification system, comprising:

a plurality of wedge-shaped slabs each having a thickness dimension of less than 1 centimeter and two slab surfaces that are slightly non-perpendicular to a thickness dimension, the plurality of wedge-shaped slabs disposed such that facing slab surfaces

of adjacent wedge-shaped slabs are slightly non-parallel and the wedge-shaped slabs are separated by an intervening volume;

a cooling fluid in the intervening volume between the adjacent wedge-shaped slabs; and

a polarized input beam passed through the slab surfaces of the wedge-shaped slabs near a Brewster angle,

wherein half of the slab surfaces of the wedge-shaped slabs are slanted in one direction and half of the slab surfaces of the wedge-shaped slabs are slanted in an opposite direction, the opposite slanting slab surfaces of the wedge-shaped slabs being configured to control spreading of an output beam.

19. (previously presented) The amplification system of claim 18, wherein the slab surfaces include an anti-reflection surface coating.

20. (cancelled)

21. (cancelled)

22. (previously presented) The amplification system of claim 18, wherein the polarized input beam has a wavelength of between 1400 nm and 1800 nm.

23. (previously presented) The amplification system of claim 18, wherein the thickness dimension of each wedge-shaped slab is less than 3 mm.

24. (New) An amplification system, comprising:

a plurality of wedge-shaped slabs each having a thickness dimension of less than 1 centimeter and two slab surfaces that are slightly non-perpendicular to a thickness dimension, the plurality of wedge-shaped slabs disposed such that facing slab surfaces

of adjacent wedge-shaped slabs are slightly non-parallel and the wedge-shaped slabs are separated by an intervening volume;

a cooling fluid in the intervening volume between the adjacent wedge-shaped slabs; and

a polarized input beam passed through the slab surfaces of the wedge-shaped slabs near a Brewster angle,

wherein one of the slab surfaces of the wedge-shaped slabs includes a grating.